ABSTRACT

A protective film for polarizing plates comprises an antireflection layer (reflectance $\leqq 0.5\%$ at 550 nm) having high refractivity layers and low refractivity layers alternately laminated on a thermoplastic film (photoelastic coefficient $\leqq 9.0\times10^{-12}$ Pa^{-1}, saturated water absorption< 0.05% by weight) and has 0.3 or smaller standard deviation of S, which is obtained by obtaining a reflectance $R(\lambda)$ at a wavelength λ while λ is increased from 380 to 780 nm by an increment $\Delta\lambda$ of 1 nm, calculating S:

$$S = \sum_{\lambda=380}^{780} \Delta\lambda \cdot R(\lambda) \qquad \cdots (1)$$

and calculating the standard deviation at 10 points randomly selected within 100 cm^2 on the surface of the film. When the film is disposed on the surface of the visual side of a display device such as a liquid crystal display device, the film prevents reflection and suppresses fluctuation in distributions of luminance and color difference due to the uniform spectral reflectance within the surface of the film.